

=> d his

(FILE 'HOME' ENTERED AT 11:38:30 ON 15 DEC 2006)

FILE 'REGISTRY' ENTERED AT 11:38:46 ON 15 DEC 2006  
E VITAMIN B1/CN

L1 1 S E3

FILE 'CAPLUS' ENTERED AT 11:39:25 ON 15 DEC 2006

L2 37398 S L1 OR THIAMINE OR ANEURINE OR APATATE(W)DRAPE OR BEIVON

OR B

L3 497448 S HORMON? (5A)CHANGE OR MENOPAUSE OR SMOKING OR HYSTERECTOMY

OR

L4 311 S L2(L)L3

L5 198 S L2(S)L3

L6 164 S L5 NOT PY>=2005

FILE 'MEDLINE, BIOSIS, EMBASE' ENTERED AT 12:02:43 ON 15 DEC 2006

FILE 'MEDLINE' ENTERED AT 12:02:51 ON 15 DEC 2006

L7 49 S L5

L8 40 S L7 NOT PY>=2004

FILE 'USPATFULL, USPAT2' ENTERED AT 12:14:07 ON 15 DEC 2006

L9 410 S L5

L10 228 S L9 NOT PY>=2005

FILE 'EMBASE, BIOSIS' ENTERED AT 12:19:42 ON 15 DEC 2006

L11 119 S L5

L12 87 DUP REM L11 (32 DUPLICATES REMOVED)

L13 77 S L12 NOT PY>=2004

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2006:543178 CAPLUS  
DOCUMENT NUMBER: 145:454310  
TITLE: Diet during pregnancy and levels of maternal pregnancy hormones in relation to the risk of breast cancer in the offspring  
AUTHOR(S): Lagiou, Pagona; Lagiou, Areti; Samoli, Evi; Hsieh, Chung-Cheng; Adami, Hans-Olov; Trichopoulos, Dimitrios  
CORPORATE SOURCE: Department of Hygiene and Epidemiology, School of Medicine, University of Athens, Athens, Greece  
SOURCE: European Journal of Cancer Prevention (2006), 15(1), 20-26  
CODEN: EJUPEK; ISSN: 0959-8278  
PUBLISHER: Lippincott Williams & Wilkins  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Birth weight is pos. associated with the risk of breast cancer in the offspring and the underlying process is likely to involve the pregnancy endocrine milieu. We have examined the association of diet and related factors during pregnancy with the levels (at the 16th and 27th gestational week) of maternal pregnancy estradiol, estriol, sex hormone-binding globulin (SHBG), progesterone and prolactin, in a cohort of 270 Caucasian women who delivered in a major hospital in Boston, USA. Estradiol and estriol were not strongly associated with any of the diet-related variables, but SHBG was significantly and consistently related inversely to pre-pregnancy body mass index and weight gain during pregnancy, and pos. to vegetable and pulses intake. Pregnancy progesterone was associated pos. with alc. and inversely with polyunsatd. lipid and vitamin B12 intake, whereas pregnancy prolactin was inversely associated with cereal consumption. If the pregnancy hormones studied are indeed involved in the intra-uterine origin of breast cancer, these findings, if confirmed, would focus dietary advice to pregnant women, with a view to reducing the risk of breast cancer in the offspring, towards avoidance of excess energy intake and an emphasis on plant foods. This advice does not contradict current dietary advice on prudent diet during pregnancy and throughout life.

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1987:188984 CAPLUS  
DOCUMENT NUMBER: 106:188984  
TITLE: Experimental possibilities and principles of the prevention of clinical malformations  
AUTHOR(S): Schubert, J.  
CORPORATE SOURCE: Klin. Poliklin. Kiefer-Gesichtschirurgie Chir. Stomatol., Martin-Luther-Univ. Halle-Wittenberg, Halle/Saale, DDR-4020, Ger. Dem. Rep.  
SOURCE: Wissenschaftliche Beiträge - Martin-Luther-Universität Halle-Wittenberg (1986), (27), 53-7  
CODEN: MLWBBJ; ISSN: 0440-1298  
DOCUMENT TYPE: Journal  
LANGUAGE: German  
AB Data are briefly given on the use of Solcoseryl (blood extract), vitamin B1 [59-43-8], and vitamin B [83-88-5] complex for reducing the incidence of cyclophosphamide- and dexamethasone-induced teratogenesis in mice. Similar substances were used prophylactically in human pregnancies at risk, in an effort to prevent clin. malformations.

L4 ANSWER 3 OF 3 MEDLINE on STN  
ACCESSION NUMBER: 2002555349 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 12318772  
TITLE: Beri-beri: "Endemic amongst urban Gambians".

AUTHOR: Rolfe M  
SOURCE: Africa health, (1994 Mar) Vol. 16, No. 3, pp. 22-3.  
Journal code: 7905114. ISSN: 0141-9536.  
Report No.: PIP-094701; POP-00231215.

PUB. COUNTRY: ENGLAND: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Population  
ENTRY MONTH: 199411  
ENTRY DATE: Entered STN: 1 Nov 2002  
Last Updated on STN: 1 Nov 2002  
Entered Medline: 2 Nov 1994

AB Beri-Beri is caused by vitamin B1 (thiamine) deficiency. Thiamine is essential for carbohydrate metabolism and the generation of energy. Depending on age and calorie intake, 1-1.5mg/day are required with a 50% increase during pregnancy and lactation. Fever and increased muscular activity will also increase thiamine requirements (storage in muscles is limited, and reserves are quickly depleted). The sources of thiamine are meat, the outer layer of cereal grains and pulses, nuts, and leafy vegetables. The vitamin is lost during milling and processing and during excessive cooking. Beri-beri takes 2 forms: wet beri-beri which has a high output biventricular failure with edema associated with profound peripheral vasodilation and tachycardia (this also occurs in an acute fulminating form known as shoshin beri-beri) and dry beri-beri with symptoms of peripheral neuropathy with taxia, weakness, paraesthesia, and patchy sensory loss with areflexia. In this form, foot and/or wrist drop may occur. Thiamine deficiency can also produce Wernicke-Korsakoff psychosis characterized by vomiting, horizontal nystagmus, ophthalmoplegia, memory loss, and confabulation. Wet beri-beri is a medical emergency treated by intravenous administration of thiamine for several days. 38 patients (27 men and 11 women) were identified with beri-beri in urban Banjul in the Gambia. 14 had wet beri-beri, 11 a mixed presentation, and 13 dry beri-beri. Most of the patients were disabled for many months. Risk factors were pregnancy, alcohol consumption, fever, exercise, diabetes, and dysentery. 4 of the patients died (2 were in the last trimester of pregnancy). The staple diet in urban areas of the Gambia is imported, polished white rice in a groundnut- or oil-based sauce with fish and vegetables such as peppers, onions, and tomatoes. Meat is too expensive for the urban poor, and fruit and vegetable consumption is highly seasonal and income-dependent. There is little chance that this diet will be changed for the 46% of the population who live in urban areas. It is likely that a substantial proportion of the population has subclinical thiamine deficiency and are at risk of beri-beri. Since thiamine added to imported rice will be destroyed by traditional means of cooking, adding the vitamin to wheat flour may be an appropriate public health measure.

L9 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2006:771158 CAPLUS  
 DOCUMENT NUMBER: 145:454090  
 TITLE: Analysis of nutritional composition and effects of  
 Yak-sun tea prescription from Oriental medicinal herbs  
 for serum lipid levels and homocysteine content  
 AUTHOR(S): Han, Jong-Hyun; Song, You-Jin; Park, Sung-Jin; Park,  
 Sung-Hye  
 CORPORATE SOURCE: Dept. of Herbal Resources, Professional Graduate  
 School of Oriental Medicine, Wonkwang University,  
 Jeonbuk, 570-749, S. Korea  
 SOURCE: Han'guk Sikp'um Yongyang Kwahak Hoechi (2006), 35(5),  
 557-564  
 CODEN: HSYHFB; ISSN: 1226-3311  
 PUBLISHER: Korean Society of Food Science and Nutrition  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Korean  
 AB This research was planned and executed to evaluate how the composition of  
 Yak-sun (oriental diet therapy) can effect health conditions of people who  
 are suffering from diet-related diseases like obesity and hyperlipidemia  
 by taking Yak-sun in a form of nutritional supplement with our daily  
 meals. We produced Yak-sun tea with Kyolmyongja, Kamguk, Kumunhwa,  
 Ch'onkung and observed nutritional composition and evaluated how this tea  
 effects  
 on serum lipids and homocysteic concentration by clin. practices. With this  
 observation, we found out that this tea has significant effect on  
 increasing of HDL-cholesterol, decreasing of LDL-cholesterol and  
 homocysteine concentration, and we think that scientific and objective  
 evaluation  
 was done on the components of Yak-sun tea prescription. We concluded that  
 we could apply the components not only in a form of tea, but also in other  
 forms of various food. The information we received from this conclusion  
 will be a basic information on how we can apply oriental medicinal  
 resources into other food and will also be a stepping stone for medicinal  
 herbs to step foot in the field of functional food research, which already  
 draws sizable attention world-wide.

L9 ANSWER 2 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2006:657100 CAPLUS  
 DOCUMENT NUMBER: 145:110407  
 TITLE: Folate-based compositions for neurological and  
 cognitive applications  
 INVENTOR(S): Hendrix, Curt  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 10 pp., Cont.-in-part of U.S.  
 Ser. No. 116,997.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006148727	A1	20060706	US 2005-293425	20051201
US 2006116334	A1	20060601	US 2005-116997	20050427
PRIORITY APPLN. INFO.:			US 2004-2750	A2 20041201
			US 2004-632681P	P 20041201
			US 2005-116997	A2 20050427

AB New formulations for the prevention and treatment of neurol. diseases and  
 cognitive deficiencies, particularly Alzheimer's disease (AD) comprise  
 folate in combination with compds. chosen to address some or all of the  
 pathways which can result in neurol. deficiencies and diseases, e.g.,

inflammation, oxidative stress, glycation/dysinsulinemia, platelet function, homocysteine levels and acetylcholinesterase inhibition, that are important contributors to the development or progression of AD. A preferred composition comprises N-acetylcysteine 500,  $\alpha$ -lipoic acid 5, pyridoxal 5-phosphate 50, turmeric 1000, vitamin B2 25, vitamin B1 25, and vitamin C 300, and hydroxycobalamin 1 mg tocopheryl succinate 400 IU.

L9 ANSWER 3 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2006:579002 CAPLUS  
DOCUMENT NUMBER: 145:130617  
TITLE: Physiological water for promoting production of body fluid  
INVENTOR(S): Zhong, Jianlin  
PATENT ASSIGNEE(S): Peop. Rep. China  
SOURCE: Faming Zhanli Shengqing Gongkai Shuomingshu, 9 pp.  
CODEN: CNXXEV  
DOCUMENT TYPE: Patent  
LANGUAGE: Chinese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1781496	A	2006.06.07	CN 2005-10071859	20050526
PRIORITY APPLN. INFO.:			CN 2005-10071859	20050526

AB The physiol. water can reduce level of high homocysteine in the blood effectively to supply ample methylation donor for all kinds of organelles so that various proteins can be methylated enough. The physiol. water is comprised of trimethylglycine 0.1-30 g, tetrahydrofolic acid 0.5-2 mg, vitamin A 0.01-0.1 mg, vitamin B12 0.01-0.2 mg, vitamin B1 5-20 mg, vitamin B2 15-20 mg, vitamin B6 10-40 mg, vitamin C 0.01-0.05 mg, L-arginine 0.5-4 g, citric acid to adjust pH 4.0-5.5, proper royal jelly, and proper menthol.

L9 ANSWER 4 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2005:454517 CAPLUS  
DOCUMENT NUMBER: 144:21054  
TITLE: Effects of hyperhomocysteinemia on the immunohistochemical reactivity for vimentin in the retinal glial cell  
AUTHOR(S): Lee, Insun; Lee, Hwayoung; Chang, Namsoo  
CORPORATE SOURCE: Department of Food and Nutritional Sciences, Asia Food and Nutrition Research Center, Ewha Womans University, Seoul, 120-750, S. Korea  
SOURCE: Hanguk Yongyang Hakhoechi (2005), 38(2), 96-103  
CODEN: HYHJA3; ISSN: 0367-6463  
PUBLISHER: Korean Nutrition Society  
DOCUMENT TYPE: Journal  
LANGUAGE: Korean

AB It has been suggested that the elevated plasma homocysteine may lead to retinal dysfunction. We investigated the effects of plasma levels of homocysteine and folate on the retinal glial cells' injuries. Male Sprague-Dawley rats were raised either on a control diet or on an exptl. diet containing 3.0 g/kg homocystine without folic acid for 10 wk. Plasma homocysteine concns. were measured by a HPLC-fluorescence detection method. Plasma folate and vitamin B1 levels were analyzed by a RIA. The response of Muller cells which are the principal glial cells of the retina was immunohistochem. examined using an antibody for vimentin, a cytoskeletal protein belonging to the family of intermediate filament. At 2 wk, the homocystine diet induced a twofold increase in plasma homocysteine, and a concomitant increase in the expression of vimentin in the Muller cells' processes spanning from the inner to outer membranes of the retina

indicating arterial degeneration. At 10 wk, the homocystine diet induced a fourfold increase in plasma homocystine, but vimentin immunoreactivity in the retinas was similar in both groups. In conclusion, increased plasma homocysteine levels have influence on morphol. and functional changes of Muller cells in the retina.

L9 ANSWER 5 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:440025 CAPLUS

DOCUMENT NUMBER: 143:260222

TITLE: Administration of B-group vitamins reduces circulating homocysteine in polycystic ovarian syndrome patients treated with metformin: a randomized trial

AUTHOR(S): Kilicdag, Esra Bulgan; Bagis, Tayfun; Tarim, Ebru; Aslan, Erdogan; Erkanli, Serkan; Simsek, Erhan; Haydardeodeoglu, Bulent; Kuscu, Esra

CORPORATE SOURCE: Department of Obstetrics and Gynecology, Baskent University Faculty of Medicine, Turk.

SOURCE: Human Reproduction (2005), 20(6), 1521-1528

CODEN: HUREEE; ISSN: 0268-1161

PUBLISHER: Oxford University Press

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Background: The aim of the current study was to assess the effects of B-group vitamins and folic acid administration on serum levels of homocysteine (Hcy) in patients with polycystic ovarian syndrome (PCOS) on short-term metformin treatment. Methods: Patients were randomly assigned to one of three treatment groups. Group 1 patients (n=20) received metformin (850 mg twice daily); group 2 patients (n=20) received metformin (850 mg twice daily) and B-group vitamins (vitamin B1, 250 mg; vitamin B6, 250 mg; vitamin B12, 1000 µg twice daily); and group 3 patients (n=20) received metformin (850 mg twice daily) and folic acid (174 µg twice daily). In all groups, lipid profiles and plasma total Hcy, vitamin B12, folic acid and glucose levels were recorded at baseline and at 3 mo. Results: 6.5% increase in Hcy levels was seen after 12 wk of metformin therapy, while 21.17 and 8.33% decreases in Hcy levels were detected when B-group vitamins or folic acid plus metformin were given resp. There were no statistically significant differences recorded in insulin sensitivity using homeostasis model assessment in the three groups. Conclusion: These findings suggest that B-group vitamins and folic acid administration counteract the Hcy-increasing effect seen with metformin therapy.

REFERENCE COUNT: 70 THERE ARE 70 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 6 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:348292 CAPLUS

DOCUMENT NUMBER: 143:152584

TITLE: Wine, beer consumption and homocysteine. The SU.VI.MAX Study

AUTHOR(S): Potier de Courcy, G.

CORPORATE SOURCE: UMR INSERM unite 557/INRA Unite 1125 - Institut Scientifique et Technique de la Nutrition et de l'Alimentation - ISTNA/CNAM, Paris, 75003, Fr.

SOURCE: Sciences des Aliments (2004), 24(6), 469-484

CODEN: SCALDC; ISSN: 0240-8813

PUBLISHER: Lavoisier

DOCUMENT TYPE: Journal

LANGUAGE: French

AB Homocysteine concentration (tHcy) even slightly above the normal range indicates

risk of cardiovascular diseases. The tHcy levels may increase with alc. consumption, but the data are ambiguous with respect to the level of alc. consumption (J-shaped curve), alc. beverage type, and population studied. An inverse association between folate nutritional status and tHcy levels has

been well established and it is explained by the role of folic acid in remethylation of homocysteine to methionine. This is the main metabolic pathway of tHcy elimination, with vitamin B12 as cotransporter. The other pathway is tHcy catabolism via trans-sulfuration to cystathione, with vitamin B6 as cofactor. To clarify pos. effects of moderate alc. consumption on cardiovascular disease, we investigated the relationship between tHcy and alc. intake, taking different types of alc. beverages into account. In 1196 middle-aged women and men of the SU.VI.MAX study, the tHcy and red blood cell folate levels were measured in intervention trial on the effects of antioxidant supplementation on chronic diseases. Intake of alc., energy, coffee, and B-vitamins was assessed by 6 dietary records. Total alc. consumption was pos. associated with tHcy in both genders. In women, tHcy levels were pos. associated with wine intake and in men with beer intake. No association was observed with the consumption of spirits. The association between beer consumption and tHcy in men was modified by the consumption of wine. In wine drinkers, the association was pos., while an inverse trend was observed in those who did not drink wine. Red blood cell folate was associated with wine drinking in men and with spirit consumption in women. The results suggest that wine consumption may increase tHcy levels, while beer consumption seems to have no (or even an inverse) effect. The results could be explained first by the much higher intakes of alc. in wine drinkers than in beer drinkers (except those who are also wine drinkers). Folate status, even satisfactory, may not be sufficient to decrease tHcy levels in the whole group of wine drinkers, given the important number of large alc. consumers included in this group. The protective effect of folates could also follow a J shaped curve and be efficient only when alc. drinking is moderate.

REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 7 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:168511 CAPLUS

DOCUMENT NUMBER: 138:337062

TITLE: Effect of nutrient supplementation on serum homocysteine, iron and proteins in psychogeriatric patients

AUTHOR(S): Bartels, Piet C. M.; Schoorl, Marianne; Peetoom, Jan J.

CORPORATE SOURCE: Department of Clinical Chemistry, Haematology and Immunology, Medical Centre Alkmaar, Alkmaar, Neth.

SOURCE: Clinical Laboratory (Heidelberg, Germany) (2003), 49(1+2), 29-34

CODEN: CLLAfp; ISSN: 1433-6510

PUBLISHER: Verlag Klinisches Labor

DOCUMENT TYPE: Journal

LANGUAGE: English

AB In a longitudinal follow-up study the effect of pharmaceutical supplementation of nutrients (folate, vitamin B12, B6, B1, C, iron and proteins) was established in 25 psychogeriatric patients (subject group). A reference group of 30 apparently healthy elderly subjects was used for comparison and statistical evaluation. At the time of hospitalization percentages concerning the incidence of decreased serum concns. reflecting an inappropriate nutrient state in the subject group amounted to 28% for vitamin B12, 20% for folate, 36% for iron, 12% for transferrin and 56% for albumin concns. Increased plasma concns. of homocysteine combined with decreased folate concns. were found in 16% of the psychogeriatric patients. If compared with the initial results at admission, after three weeks of nutrient supplementation the vitamin B12 and folate serum concns. were increased. Results for serum iron concns. remained below the reference range interval in 5 of the 25 subjects reflecting iron deficiency. Initially decreased serum transferrin concns. did not return to the reference range. Serum albumin levels still further decreased after admission to the hospital, resulting after three weeks in albumin concns. below the reference range for 68% of the subjects. It is concluded that supplementation

of folate and vitamin B12 lowered homocysteine plasma concns. successfully. Supplementation of protein nutrients is not appropriate in order to restore disturbances of protein metabolism Persisting low concns. of proteins in serum are indicative of irreversible decreased synthesis.

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 8 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:917192 CAPLUS

DOCUMENT NUMBER: 138:13634

TITLE: Visual clinical nutrition 2001. Vitamin metabolic disorder

AUTHOR(S): Tamai, Hiroshi

CORPORATE SOURCE: Dep. Pediatr., Osaka Med. Coll., Japan

SOURCE: Rinsho Eiyo (2002), 101(6), 617-625

CODEN: RNEYAW; ISSN: 0485-1412

PUBLISHER: Ishiyaku Shuppan

DOCUMENT TYPE: Journal; General Review

LANGUAGE: Japanese

AB A review on (1) homocysteine accumulation and atherosclerosis induced by the deficiency of folic acid, vitamin B6, or vitamin B12, (2) prevention of neural tube defects and other congenital anomalies by folic acid, (3) mutations in genes for methylenetetrahydrofolate reductase or methionine synthase reductase as maternal risk factors for Down syndrome, (4) mutations in  $\alpha$ -tocopherol transfer protein in humans with ataxia with isolated vitamin E deficiency, (5) mol. pathol. of vitamin D metabolism disorders, and (6) beriberi and Wernicke encephalopathy caused by vitamin B1 deficiency. Clin. tests, diagnosis, and nutritional therapy of these diseases are summarized.

L9 ANSWER 9 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:510199 CAPLUS

DOCUMENT NUMBER: 137:168790

TITLE: Hyperhomocysteinemia, and low intakes of folic acid and vitamin B12 in urban North India

AUTHOR(S): Misra, Anoop; Vikram, Naval K.; Pandey, R. M.; Dwivedi, Manjari; Ahmad, Faiz Uddin; Luthra, Kalpana; Jain, Kajal; Khanna, Nidhi; Devi, J. Rama; Sharma, Rekha; Guleria, Randeep

CORPORATE SOURCE: Department of Medicine, All India Institute of Medical Sciences, New Delhi, 110029, India

SOURCE: European Journal of Nutrition (2002), 41(2), 68-77

CODEN: EJNUFZ; ISSN: 1436-6207

PUBLISHER: Steinkopff Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Background and Aim An adverse coronary risk profile has been reported amongst rural-to-urban migrant population living in urban slums undergoing stressful socio-economic transition. These individuals are likely to have low intakes of folic acid and vitamin B12, which may have an adverse impact on serum levels of homocysteine (Hcy). To test this hypothesis, we studied serum levels of Hcy in subjects living in an urban slum of North India and healthy subjects from urban nonslum area. Methods Group I consisted of 46 subjects (22 males and 24 females) living in an urban slum, while group II consisted of healthy subjects (n = 26, 13 males and 13 females) living in the adjacent non-slum area. Anthropometric measurements, biochem. profile (fasting blood glucose, total cholesterol, serum triglycerides, low-d. lipoprotein cholesterol, and high-d. lipoprotein cholesterol) and fasting serum levels of Hcy were measured. Dietary intakes of folic acid, vitamin B12, vitamin B1, and iron were calculated by the 24-h dietary recall method. Serum levels of Hcy were correlated with dietary intakes of nutrients, anthropometry, and metabolic variables. Results Sex-adjusted serum levels of Hcy in  $\mu$ mol/L (Mean  $\pm$  SD) were high, though statistically comparable, in

both the groups (group I:  $20.8 \pm 5.9$  and group II:  $23.2 \pm 5.9$ ). Overall, higher than normal serum levels of Hcy ( $> 15 \mu\text{mol/L}$ ) were recorded in 84% of the subjects. A substantial proportion of subjects in both groups had daily nutrient intakes below that recommended for the Asian Indian population (folic acid: 93.4% in group I and 96.7% in group II, vitamin B12: 76.1% in group I and 88.4% in group II). However, between the 2 groups, average daily dietary intakes of both the nutrients were statistically comparable. As compared to non-vegetarians, vegetarians showed lower intakes of folic acid ( $p < 0.01$ ) and vitamin B12 ( $p < 0.01$ ) in both groups. On multivariate linear regression anal. with serum Hcy as the response variable and vegetarian/non-vegetarian status and sex (male/female) as predictor variables, higher serum levels of Hcy were observed in vegetarians vs non-vegetarians ( $\beta = 4.6$ ,  $p < 0.05$ ) and males vs females ( $\beta = 5.3$ ,  $p < 0.01$ ). Conclusions Low intakes of folic acid and vitamin B12, and hyperhomocysteinemia, in both the healthy population living in urban slums and adjacent urban non-slum areas, are important observations for the prevention of nutritional and cardiovascular diseases in the Indian subcontinent.

REFERENCE COUNT: 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 10 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:412147 CAPLUS

DOCUMENT NUMBER: 137:78315

TITLE: Riboflavin is a determinant of total homocysteine plasma concentrations in end-stage renal disease patients

AUTHOR(S): Skoupy, Sonja; Fodinger, Manuela; Veitl, Mario; Perschl, Agnes; Puttinger, Heidi; Rohrer, Claudia; Schindler, Karin; Vychytil, Andreas; Horl, Walter H.; Sunder-Plassmann, Gere

CORPORATE SOURCE: Division of Nephrology and Dialysis, University of Vienna, Vienna, Austria

SOURCE: Journal of the American Society of Nephrology (2002), 13(5), 1331-1337

CODEN: JASNEU; ISSN: 1046-6673

PUBLISHER: Lippincott Williams & Wilkins

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The effect of thiamine (vitamin B1) or riboflavin (vitamin B2) availability on fasting total homocysteine (tHcy) plasma levels in end-stage renal disease patients is unknown. A cross-sectional study was performed in a population of non-vitamin supplemented patients maintained on continuous ambulatory peritoneal dialysis. Red blood cell availability of thiamine ( $\alpha$ -ETK) and of riboflavin ( $\alpha$ -EGR), along with other predictors of tHcy plasma levels, was considered in the anal. There was a linear association of  $\alpha$ -EGR with tHcy plasma concns. ( $P = 0.009$ ), which was not observed for  $\alpha$ -ETK. Among red blood cell vitamins,  $\alpha$ -EGR was the only predictor of tHcy levels ( $P = 0.035$ ), whereas  $\alpha$ -ETK, red blood cell pyridoxal-5-phosphate supply ( $\alpha$ -EGOT) and red blood cell folate levels had no effect. The risk for having a high tHcy plasma levels within the fourth quartile (plasma tHcy  $> 38.3 \mu\text{mol/L}$ ) was increased by an  $\alpha$ -EGR  $>$  median (odds ratio, 4.706; 95% confidence interval, 1.124 to 19.704;  $P = 0.026$ ). By way of contrast,  $\alpha$ -ETK had no effect in these analyses. Independent predictors of tHcy plasma levels were serum albumin,  $\alpha$ -EGR, red blood cell folate, and certain MTHFR genotypes. A logistic regression anal. showed that the MTHFR genotype is a predictor for having a tHcy plasma concentration within the fourth quartile. In summary, riboflavin availability, as measured by  $\alpha$ -EGR, is a determinant of fasting tHcy plasma levels in peritoneal dialysis patients. This finding may have implications for tHcy lowering therapy in individuals with end-stage renal disease.

REFERENCE COUNT: 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 11 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2000:856448 CAPLUS  
DOCUMENT NUMBER: 135:60564  
TITLE: Water-soluble vitamin levels in patients undergoing high-flux hemodialysis and receiving long-term oral postdialysis vitamin supplementation  
AUTHOR(S): Descombes, Eric; Boulat, Olivier; Perriard, Francois; Fellay, Gilbert  
CORPORATE SOURCE: Dialysis Unit, Hopital Cantonal, Fribourg, CH-1700, Switz.  
SOURCE: Artificial Organs (2000), 24(10), 773-778  
CODEN: ARORD7; ISSN: 0160-564X  
PUBLISHER: Blackwell Science, Inc.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB The prescription of multivitamin supplements for dialysis patients is routine practice, but the doses prescribed differ greatly from one dialysis center to another. Few data are available concerning long-term vitamin supplementation and its effects on patients either on high-flux hemodialysis or receiving postdialysis supplementation. For several years, we have systematically prescribed to our patients an oral postdialysis multivitamin supplement containing thiamin hydrochloride 100 mg, riboflavin 20 mg, pyridoxine hydrochloride 50 mg, folic acid 6 mg, and ascorbic acid 500 mg. The aim of this study was to perform a cross-sectional long-term evaluation of the vitamin levels in patients who received this vitamin supplement for at least 12 mo. We also were interested in investigating the plasma oxalic acid and total homocysteine levels associated with the long-term prescription of these vitamin supplements. Thirty-three patients on high-flux dialysis were studied. Vitamin levels and/or vitamin-dependent enzymic activities were within the normal range (N) in all patients. The mean results ( $\pm SD$ ) were plasma ascorbic acid  $13.6 \pm 6.4$  mg/L (N > 4), plasma folate  $14.1 \pm 1.1$   $\mu$ g/L (N > 3), for vitamin B1,  $\alpha$ -ETK  $1.02 \pm 0.02$  (N < 1.18) and ETKo  $100 \pm 13$  U/L (N > 70), for vitamin B2,  $\alpha$ -EGR  $1.00 \pm 0.07$  (N < 1.52) and EGRo  $1282 \pm 213$  U/L (N > 672), and for vitamin B6,  $\alpha$ -EGOT  $1.34 \pm 0.10$  (N < 1.8) and EGOTO  $380 \pm 84$  U/L (N > 228). Plasma oxalic acid was higher than normal in all patients (mean =  $61 \pm 15$   $\mu$ mol/L, N < 33). However, all patients had oxalic acid levels within the range reported in the literature for patients not taking extra ascorbic acid. Mean total homocysteine was  $24 \pm 8$   $\mu$ mol/L with only 4 patients (12%) having normal levels (N < 15). In conclusion, the postdialysis supplement given provides adequate vitamin levels in almost all patients in the long term. Postdialysis prescription allows an optimal compliance with the treatment, is well accepted by the patients, and is cost-effective.  
REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 12 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1996:692720 CAPLUS  
DOCUMENT NUMBER: 126:18225  
TITLE: Thiamin (vitamin B1)  
supplementation does not reduce fasting blood homocysteine concentration in most homozygotes for homocystinuria  
AUTHOR(S): Franken, Diana G.; Blom, Henk J.; Boers, Godfried H. J.; Tangerman, Albert; Thomas, Chris M. G.; Trijbels, Frans J. M.  
CORPORATE SOURCE: Department of Radiology, University Hospital Nijmegen, P.O. Box 9101, HB Nijmegen, 6500, Neth.  
SOURCE: Biochimica et Biophysica Acta, Molecular Basis of Disease (1996), 1317(2), 101-104

CODEN: BBADEX; ISSN: 0925-4439

PUBLISHER: Elsevier B.V.  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Homozygotes for homocystinuria due to cystathione synthase (CS) deficiency accumulate homocysteine and methionine in their blood and tissues. High-dose pyridoxine, folic acid, vitamin B12, or betaine are therapeutic options to lower the elevated homocysteine concentration. These compds. stimulate the transsulfuration or remethylation of homocysteine. Despite such treatment, elevated blood homocysteine concns. may persist in many homocystinurics. Therefore, it is warranted to study alternative regimens to reduce the blood homocysteine concentration in homocystinurics. Apart from entering the transsulfuration pathway, methionine can be catabolized via the transamination pathway, by conversion into 4-methylthio-2-oxobutyrate (MTOB), followed by oxidative decarboxylation of MTOB to 3-methylthiopropionate. Thiamine pyrophosphate, the active form of thiamine, is a cofactor of the supposed rate-limiting oxidative decarboxylation in the transamination of methionine. The effect of thiamine, administered in 2 or 3 daily doses of 25 mg orally, was studied in nine homozygote CS deficient patients. Methionine levels decreased in 6 out of 9 patients. In 8 out of 9 patients, however, the levels of plasma homocysteine remained virtually unchanged, as did the serum transamination metabolites in all patients. We conclude that vitamin B1 cannot be used as an addnl. homocysteine-lowering treatment in most homozygotes for homocystinuria.

L9 ANSWER 13 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:41163 CAPLUS  
DOCUMENT NUMBER: 124:109242  
TITLE: Vitamin status in mice tissues during methylmercury intoxication and detoxication  
AUTHOR(S): Sood, Prem Prakash; Vijayalakshmi, Kodi  
CORPORATE SOURCE: Department Biosciences, Saurashtra University, Rajkot, 360 005, India  
SOURCE: Journal of Nutritional & Environmental Medicine (1995), 5(2), 133-41  
CODEN: JNEMFF; ISSN: 1359-0847  
PUBLISHER: Carfax  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB This study investigates the status of vitamins in nervous and non-nervous tissues of methylmercury chloride (MMC)-intoxicated mice as well as during their exogenous application either alone or in combination with monothiols. The mice were intoxicated with MMC at a daily dose of 1 mg kg<sup>-1</sup> for 7 days and thereafter for another 7 days treated sep. with vitamin B complex, vitamin E, glutathione and N-acetyl-DL-homocysteine thiolactone (either alone or in combination). One group was kept without toxicant during this period. One intoxicated group was sacrificed on the eighth day, the rest were sacrificed on the fifteenth day. The study shows a significant decrease of vitamin B1, B2, B6 and E in all the tissues (except riboflavin in kidney and liver of the withdrawal group which show significant increase) during intoxication and a significant recovery (in many cases to control level) during therapy.

L9 ANSWER 14 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1973:96307 CAPLUS  
DOCUMENT NUMBER: 78:96307  
TITLE: Cangenital disorders of amino acids sensitive to vitamins  
AUTHOR(S): Pham Huu Trung, M. T.  
CORPORATE SOURCE: Fr.

SOURCE: Medecine Infantile (1972), 79(7), 617-23  
CODEN: MINFAW; ISSN: 0025-6773  
DOCUMENT TYPE: Journal; General Review  
LANGUAGE: French  
AB A review. Title disorders include vitamin B1 in relation to pyruvic acidosis with hyperalaninemia, vitamin B6 and homocystinuria, cystathioninuria and xanthurenic aciduria, vitamin B12 and methylmalonic acidemia, and biotin and propionic acidosis and  $\beta$ -methylcrotonylglycinuria. 33 refs.

L9 ANSWER 15 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1970:29120 CAPLUS  
DOCUMENT NUMBER: 72:29120  
TITLE: Genetics of phytopathogenic pseudomonads. III.  
Biochemical mutants of *Pseudomonas tabaci*  
AUTHOR(S): Vasil'eva, S. V.; D'yakov, Yu. T.; Rapoport, I. A.  
CORPORATE SOURCE: Mosk. Gos. Univ. im. Lomonosova, Moscow, USSR  
SOURCE: Biologicheskie Nauki (Moscow) (1969), (7), 104-10  
CODEN: BINKBT; ISSN: 0470-4606  
DOCUMENT TYPE: Journal  
LANGUAGE: Russian  
AB The bacterial cells were treated with a 0.077% solution of nitrosomethylurea at pH 6, 28°, for 23 hr. Seven of the resulting mutants required methionine, one arginine, and one adenine, and one required phenylalanine, tyrosine, and tryptophan. The morphol. and biochem. activities of the mutants were similar to the wild strain. Syntrophism was observed only between the arginine-requiring and the wild strain. The mutants did not revert easily to the parent strain except for the adenine deficient strain. Some of the methionine-requiring strains grew only in presence of methionine, some could utilize methionine precursors, homocysteine , or vitamin B1 2.

L9 ANSWER 16 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1956:13082 CAPLUS  
DOCUMENT NUMBER: 50:13082  
ORIGINAL REFERENCE NO.: 50:2771c-d  
TITLE: Effect of diet on betaine-homocysteine transmethylase of rat liver. III. B vitamins other than vitamin B12  
AUTHOR(S): Ericson, L. E.; Harper, A. E.  
CORPORATE SOURCE: Univ. of Wisconsin, Madison  
SOURCE: Proceedings of the Society for Experimental Biology and Medicine (1955), 90, 298-300  
CODEN: PSEBAA; ISSN: 0037-9727  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable  
AB When a diet deficient in one of the vitamins (thiamine, riboflavin, niacin, pyridoxine, pantothenic acid, or folic acid) was fed to rats, the activity of the betaine-homocysteine transmethylase of their livers was found to be higher than in livers of controls fed a complete diet. Deficiency of biotin or choline caused a slight decrease in activity of the enzyme.

L9 ANSWER 17 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1954:22239 CAPLUS  
DOCUMENT NUMBER: 48:22239  
ORIGINAL REFERENCE NO.: 48:4047a-c  
TITLE: A relationship of homocysteine metabolism to thiamine, serine, and adenine biosynthesis in a mutant strain of *Neurospora*  
AUTHOR(S): Doudney, C. O.; Wagner, R. P.  
CORPORATE SOURCE: Univ. of Texas, Austin  
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (1953), 39, 1043-52  
CODEN: PNASA6; ISSN: 0027-8424

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB Growth of a mutant strain Neurospora crassa UT77a was equivalent to that of wild type strains. Threonine (I) at concns. higher than approx. 5 + 10-4M inhibited the maximum growth (Ibid. 38, 196(1952)). The inhibition was competitively reversed by homocysteine (II) or noncompetitively by methionine (III). A combination of choline (IV) and 4-methyl-5-( $\beta$ -hydroxyethyl)thiazole (the thiazole moiety of thiamine) (V) reversed the I inhibition at a concentration of 10-3M. At high concns. of I, both adenine

(VI)

and serine (VII) were required in addition to V and IV to completely reverse the inhibition. IV and some other methyl donors, such as sarcosine, were somewhat inhibitory; this inhibition was reversed by II, III, or V. Both I and IV reduced the accumulation of V in mycelia of the growing UT77a, but had no effect on wild type strains. The reduction was corrected by addition of homocysteine thiolactone (VIII). VIII slightly increased the V content of mycelia of UT77a in the absence of I or IV. The authors concluded that I inhibited growth of the mold by interrupting the biosynthesis of III, V, and, at higher concns. of I, also VI and VII. A specific competitive interference of I in the formation of an intermediate to the III synthesis from II and the possible roles of II in the biosynthesis of VI, VII and V are discussed.

L9 ANSWER 18 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1944:37175 CAPLUS

DOCUMENT NUMBER: 38:37175

ORIGINAL REFERENCE NO.: 38:5537d

TITLE: Importance of choline in nutrition

AUTHOR(S): Foglia, V. G.

SOURCE: Medicina (1942), 2, 530-47

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB Lack of choline in diet causes fatty degeneration of liver, hemorrhagic lesions in the kidney, and retardation or cessation of growth. Its relations to vitamin B1 and metabolism of fats, proteins and creatine are described. Choline is formed in the body through a transfer of the methyl groups from methionine to ethanolamine and transfers of methyl groups to homocysteine to form methionine and creatine.

L9 ANSWER 19 OF 23 MEDLINE on STN

ACCESSION NUMBER: 2005261051 MEDLINE

DOCUMENT NUMBER: PubMed ID: 15790610

TITLE: Administration of B-group vitamins reduces circulating homocysteine in polycystic ovarian syndrome patients treated with metformin: a randomized trial.

AUTHOR: Kilicdag Esra Bulgan; Bagis Tayfun; Tarim Ebru; Aslan Erdogan; Erkanli Serkan; Simsek Erhan; Haydardedeoglu Bulent; Kuscu Esra

CORPORATE SOURCE: Department of Obstetrics and Gynecology, Baskent University Faculty of Medicine, Turkey.. esrabulgan1972@mynet.com

SOURCE: Human reproduction (Oxford, England), (2005 Jun) Vol. 20, No. 6, pp. 1521-8. Electronic Publication: 2005-03-24. Journal code: 8701199. ISSN: 0268-1161.

PUB. COUNTRY: England: United Kingdom

DOCUMENT TYPE: (CLINICAL TRIAL)

Journal; Article; (JOURNAL ARTICLE)  
(RANDOMIZED CONTROLLED TRIAL)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200509

ENTRY DATE: Entered STN: 20 May 2005

Last Updated on STN: 30 Sep 2005

Entered Medline: 29 Sep 2005

AB BACKGROUND: The aim of the current study was to assess the effects of B-group vitamins and folic acid administration on serum levels of homocysteine (Hcy) in patients with polycystic ovarian syndrome (PCOS) on short-term metformin treatment. METHODS: Patients were randomly assigned to one of three treatment groups. Group 1 patients (n = 20) received metformin (850 mg twice daily); group 2 patients (n = 20) received metformin (850 mg twice daily) and B-group vitamins (vitamin B1, 250 mg; vitamin B6, 250 mg; vitamin B12, 1000 microg twice daily); and group 3 patients (n = 20) received metformin (850 mg twice daily) and folic acid (174 microg twice daily). In all groups, lipid profiles and plasma total Hcy, vitamin B12, folic acid and glucose levels were recorded at baseline and at 3 months. RESULTS: A 26.5% increase in Hcy levels was seen after 12 weeks of metformin therapy, while 21.17 and 8.33% decreases in Hcy levels were detected when B-group vitamins or folic acid plus metformin were given respectively. There were no statistically significant differences recorded in insulin sensitivity using homeostasis model assessment in the three groups. CONCLUSION: These findings suggest that B-group vitamins and folic acid administration counteract the Hcy-increasing effect seen with metformin therapy.

L9 ANSWER 20 OF 23 MEDLINE on STN

ACCESSION NUMBER: 2002340948 MEDLINE

DOCUMENT NUMBER: PubMed ID: 12083316

TITLE: Hyperhomocysteinemia, and low intakes of folic acid and vitamin B12 in urban North India.

AUTHOR: Misra Anoop; Vikram Naval K; Pandey R M; Dwivedi Manjari; Ahmad Faiz Uddin; Luthra Kalpana; Jain Kajal; Khanna Nidhi; Devi J Rama; Sharma Rekha; Guleria Randeep

CORPORATE SOURCE: Department of Medicine, All India Institute of Medical Sciences, New Delhi.. anoopmisra@hotmail.com

SOURCE: European journal of nutrition, (2002 Apr) Vol. 41, No. 2, pp. 68-77.

PUB. COUNTRY: Journal code: 100888704. ISSN: 1436-6207.

DOCUMENT TYPE: Germany: Germany, Federal Republic of Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200301

ENTRY DATE: Entered STN: 27 Jun 2002

Last Updated on STN: 22 Jan 2003

Entered Medline: 21 Jan 2003

AB BACKGROUND AND AIM: An adverse coronary risk profile has been reported amongst rural-to-urban migrant population living in urban slums undergoing stressful socio-economic transition. These individuals are likely to have low intakes of folic acid and vitamin B12, which may have an adverse impact on serum levels of homocysteine (Hcy). To test this hypothesis, we studied serum levels of Hcy in subjects living in an urban slum of North India and healthy subjects from urban nonslum area.

METHODS: Group I consisted of 46 subjects (22 males and 24 females) living in an urban slum, while group II consisted of healthy subjects (n = 26, 13 males and 13 females) living in the adjacent non-slum area.

Anthropometric measurements, biochemical profile (fasting blood glucose, total cholesterol, serum triglycerides, low-density lipoprotein cholesterol, and high-density lipoprotein cholesterol) and fasting serum levels of Hcy were measured. Dietary intakes of folic acid, vitamin B12, vitamin B1, and iron were calculated by the 24-hour dietary recall method. Serum levels of Hcy were correlated with dietary intakes of nutrients, anthropometry, and metabolic variables.

RESULTS: Sex-adjusted serum levels of Hcy in micromol/L (Mean +/- SD) were high, though statistically comparable, in both the groups (group I: 20.8 +/- 5.9 and group II: 23.2 +/- 5.9). Overall, higher than normal serum levels of Hcy (> 15 micromol/L) were recorded in 84% of the subjects. A substantial proportion of subjects in both groups had daily nutrient intakes below that recommended for the Asian Indian population (folic acid: 93.4% in

group I and 96.7% in group II, vitamin B12: 76.1 % in group I and 88.4% in group II). However, between the two groups, average daily dietary intakes of both the nutrients were statistically comparable. As compared to non-vegetarians, vegetarians showed lower intakes of folic acid ( $p < 0.01$ ) and vitamin B12 ( $p < 0.01$ ) in both groups. On multivariate linear regression analysis with serum Hcy as the response variable and vegetarian/non-vegetarian status and sex (male/female) as predictor variables, higher serum levels of Hcy were observed in vegetarians vs non-vegetarians ( $1 = 4.6$ ,  $p < 0.05$ ) and males vs females ( $\beta = 5.3$ ,  $p < 0.01$ ). CONCLUSIONS: Low intakes of folic acid and vitamin B12, and hyperhomocysteinemias, in both the healthy population living in urban slums and adjacent urban non-slum areas, are important observations for the prevention of nutritional and cardiovascular diseases in the Indian subcontinent.

L9 ANSWER 21 OF 23 MEDLINE on STN  
ACCESSION NUMBER: 2002220447 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 11960300  
TITLE: Study of the effect of a liquid nutrition supplement on the nutritional status of psycho-geriatric nursing home patients.  
AUTHOR: Wouters-Wesseling W; Wouters A E J; Kleijer C N; Bindels J G; de Groot C P G M; van Staveren W A  
CORPORATE SOURCE: Numico Research BV, Wageningen, The Netherlands.  
SOURCE: European journal of clinical nutrition, (2002 Mar) Vol. 56, No. 3, pp. 245-51.  
Journal code: 8804070. ISSN: 0954-3007.  
PUB. COUNTRY: England: United Kingdom  
DOCUMENT TYPE: (CLINICAL TRIAL)  
Journal; Article; (JOURNAL ARTICLE)  
(RANDOMIZED CONTROLLED TRIAL)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200205  
ENTRY DATE: Entered STN: 18 Apr 2002  
Last Updated on STN: 31 May 2002  
Entered Medline: 30 May 2002

AB OBJECTIVES: To evaluate the acceptance of a multinutrient liquid nutrition supplement in psycho-geriatric nursing home patients and the effect on weight, plasma nutrients and activities of daily life. DESIGN: Double-blind, placebo-controlled 12-week intervention study. SETTING: Two nursing homes in Boxtel, The Netherlands. SUBJECTS: Forty-two (body mass index (BMI)  $<23$  kg/m<sup>2</sup> for men or  $<25$  kg/m<sup>2</sup> for women) psycho-geriatric nursing home patients aged 60 y or over. INTERVENTIONS: Provision with a complete micronutrient-enriched liquid nutrition supplement of 125 ml and 0.6 MJ (135 kcal) or placebo twice daily during daytime between main meals. Study parameters were assessed at 0, 6 and 12 weeks. MAIN OUTCOME FOR MEASURES: Weight, Barthel index of daily activities, several plasma values (albumin, C-reactive protein (CRP), homocysteine, thiamine, thiamine diphosphate (TDF), vitamin B6, vitamin B12, folic acid, vitamin D), bowel function. RESULTS: The supplement was well accepted. Thirty-five patients completed the intervention period (16 control group; 19 supplement group). Baseline daily nutrient intake was low. A statistically significant improvement was observed for body weight (difference between groups 2.2 kg,  $P=0.03$ ), and homocysteine, vitamin B1, TDF, vitamin B6, vitamin B12, folate and vitamin D in the supplement group compared to the placebo group. No significant difference was observed in the Barthel index (mean difference  $-0.3+/-1.1$  for both groups). No difference in occurrence of diarrhoea was observed. CONCLUSIONS: The study shows that nutritional supplementation is well accepted and can improve the nutritional status of psycho-geriatric nursing home patients. SPONSORSHIP: Numico Research BV.

ACCESSION NUMBER: 2001305148 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 11091166  
TITLE: Water-soluble vitamin levels in patients undergoing high-flux hemodialysis and receiving long-term oral postdialysis vitamin supplementation.  
AUTHOR: Descombes E; Boulat O; Perriard F; Fellay G  
CORPORATE SOURCE: Dialysis Unit, Hopital Cantonal, Fribourg, Switzerland..  
DescombesE@hopcantfr.ch  
SOURCE: Artificial organs, (2000 Oct) Vol. 24, No. 10, pp. 773-8.  
Journal code: 7802778. ISSN: 0160-564X.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200105  
ENTRY DATE: Entered STN: 4 Jun 2001  
Last Updated on STN: 4 Jun 2001  
Entered Medline: 31 May 2001

AB The prescription of multivitamin supplements for dialysis patients is routine practice, but the doses prescribed differ greatly from one dialysis center to another. Few data are available concerning long-term vitamin supplementation and its effects on patients either on high-flux hemodialysis or receiving postdialysis supplementation. For several years, we have systematically prescribed to our patients an oral postdialysis multivitamin supplement containing thiamine hydrochloride 100 mg, riboflavin 20 mg, pyridoxine hydrochloride 50 mg, folic acid 6 mg, and ascorbic acid 500 mg. The aim of this study was to perform a cross-sectional long-term evaluation of the vitamin levels in patients who received this vitamin supplement for at least 12 months. We also were interested in investigating the plasma oxalic acid and total homocysteine levels associated with the long-term prescription of these vitamin supplements. Thirty-three patients on high-flux dialysis were studied. Vitamin levels and/or vitamin-dependent enzymatic activities were within the normal range (N) in all patients. The mean results (+/-SD) were plasma ascorbic acid 13.6 +/- 6.4 mg/L (N > 4), plasma folate 14.1 +/- 1.1 microg/L (N > 3), for vitamin B1, alpha-ETK 1.02 +/- 0.02 (N < 1.18) and ETKo 100 +/- 13 U/L (N > 70), for vitamin B2, alpha-EGR 1.00 +/- 0.07 (N < 1.52) and EGRo 1282 +/- 213 U/L (N > 672), and for vitamin B6, alpha-EGOT 1.34 +/- 0.10 (N < 1.8) and EGOTO 380 +/- 84 U/L (N > 228). Plasma oxalic acid was higher than normal in all patients (mean = 61 +/- 15 micromol/L, N < 33). However, all patients had oxalic acid levels within the range reported in the literature for patients not taking extra ascorbic acid. Mean total homocysteine was 24 +/- 8 micromol/L with only 4 patients (12%) having normal levels (N < 15). In conclusion, the postdialysis supplement given provides adequate vitamin levels in almost all patients in the long term. Postdialysis prescription allows an optimal compliance with the treatment, is well accepted by the patients, and is cost-effective.

L9 ANSWER 23 OF 23 MEDLINE on STN  
ACCESSION NUMBER: 97107454 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 8950194  
TITLE: Thiamine (vitamin B1) supplementation does not reduce fasting blood homocysteine concentration in most homozygotes for homocystinuria.  
AUTHOR: Franken D G; Blom H J; Boers G H; Tangerman A; Thomas C M; Trijbels F J  
CORPORATE SOURCE: Department of Radiology, University Hospital Nijmegen, The Netherlands.  
SOURCE: Biochimica et biophysica acta, (1996 Nov 15) Vol. 1317, No. 2, pp. 101-4.  
Journal code: 0217513. ISSN: 0006-3002.  
PUB. COUNTRY: Netherlands

DOCUMENT TYPE: (CLINICAL TRIAL)  
Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199701  
ENTRY DATE: Entered STN: 28 Jan 1997  
Last Updated on STN: 28 Jan 1997  
Entered Medline: 3 Jan 1997

AB   Homozygotes for homocystinuria due to cystathionine synthase (CS) deficiency accumulate homocysteine and methionine in their blood and tissues. High-dose pyridoxin, folic acid, vitamin B12, or betaine are therapeutical options to lower the elevated homocysteine concentration. These compounds stimulate the transsulfuration or remethylation of homocysteine. Despite such treatment, elevated blood homocysteine concentrations may persist in many homocystinurics. Therefore, it is warranted to study alternative regimen to reduce the blood homocysteine concentration in homocystinurics. Apart from entering the transsulfuration pathway, methionine can be catabolized via the transamination pathway, by conversion into 4-methylthio-2-oxobutyrate (MTOB), followed by oxidative decarboxylation of MTOB to 3-methylthiopropionate. Thiamine pyrophosphate, the active form of thiamine, is a cofactor of the supposed rate-limiting oxidative decarboxylation in the transamination of methionine. The effect of thiamine administered in 2 or 3 daily doses of 25 mg orally, was studied in nine homozygote CS deficient patients. Methionine levels decreased in 6 out of 9 patients. In 8 out of 9 patients, however, the levels of plasma homocysteine remained virtually unchanged, as did the serum transamination metabolites in all patients. We conclude that vitamin B1 cannot be used as an additional homocysteine-lowering treatment in most homozygotes for homocystinuria.

L11 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2002:510199 CAPLUS  
DOCUMENT NUMBER: 137:168790  
TITLE: Hyperhomocysteinemia, and low intakes of folic acid  
and vitamin B12 in urban North India  
AUTHOR(S): Misra, Anoop; Vikram, Naval K.; Pandey, R. M.;  
Dwivedi, Manjari; Ahmad, Faiz Uddin; Luthra, Kalpana;  
Jain, Kajal; Khanna, Nidhi; Devi, J. Rama; Sharma,  
Rekha; Guleria, Randeep  
CORPORATE SOURCE: Department of Medicine, All India Institute of Medical  
Sciences, New Delhi, 110029, India  
SOURCE: European Journal of Nutrition (2002), 41(2), 68-77  
CODEN: EJNUFZ; ISSN: 1436-6207  
PUBLISHER: Steinkopff Verlag  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Background and Aim An adverse coronary risk profile has been reported amongst rural-to-urban migrant population living in urban slums undergoing stressful socio-economic transition. These individuals are likely to have low intakes of folic acid and vitamin B12, which may have an adverse impact on serum levels of homocysteine (Hcy). To test this hypothesis, we studied serum levels of Hcy in subjects living in an urban slum of North India and healthy subjects from urban nonslum area. Methods Group I consisted of 46 subjects (22 males and 24 females) living in an urban slum, while group II consisted of healthy subjects (n = 26, 13 males and 13 females) living in the adjacent non-slum area. Anthropometric measurements, biochem. profile (fasting blood glucose, total cholesterol, serum triglycerides, low-d. lipoprotein cholesterol, and high-d. lipoprotein cholesterol) and fasting serum levels of Hcy were measured. Dietary intakes of folic acid, vitamin B12, vitamin B1, and iron were calculated by the 24-h dietary recall method. Serum levels of Hcy were correlated with dietary intakes of nutrients, anthropometry, and metabolic variables. Results Sex-adjusted serum levels of Hcy in  $\mu\text{mol/L}$  (Mean  $\pm$  SD) were high, though statistically comparable, in both the groups (group I:  $20.8 \pm 5.9$  and group II:  $23.2 \pm 5.9$ ). Overall, higher than normal serum levels of Hcy ( $> 15 \mu\text{mol/L}$ ) were recorded in 84% of the subjects. A substantial proportion of subjects in both groups had daily nutrient intakes below that recommended for the Asian Indian population (folic acid: 93.4% in group I and 96.7% in group II, vitamin B12: 76.1% in group I and 88.4% in group II). However, between the 2 groups, average daily dietary intakes of both the nutrients were statistically comparable. As compared to non-vegetarians, vegetarians showed lower intakes of folic acid ( $p < 0.01$ ) and vitamin B12 ( $p < 0.01$ ) in both groups. On multivariate linear regression anal. with serum Hcy as the response variable and vegetarian/non-vegetarian status and sex (male/female) as predictor variables, higher serum levels of Hcy were observed in vegetarians vs non-vegetarians ( $\beta = 4.6$ ,  $p < 0.05$ ) and males vs females ( $\beta = 5.3$ ,  $p < 0.01$ ). Conclusions Low intakes of folic acid and vitamin B12, and hyperhomocysteinemia, in both the healthy population living in urban slums and adjacent urban non-slum areas, are important observations for the prevention of nutritional and cardiovascular diseases in the Indian subcontinent.

REFERENCE COUNT: 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 3 MEDLINE on STN  
ACCESSION NUMBER: 2004278859 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 15178225  
TITLE: Large-artery stroke in a young patient with Crohn's disease. Role of vitamin B6 deficiency-induced hyperhomocysteinemia.  
AUTHOR: Younes-Mhenni S; Derex L; Berruyer M; Noghogossian N; Philippeau F; Salzmann M; Trouillas P

CORPORATE SOURCE: Service d'Urgences NeuroVasculaires, Hopital Neurologique,  
59 Boulevard Pinel, 69003 Lyon, France.  
SOURCE: Journal of the neurological sciences, (2004 Jun 15) Vol.  
221, No. 1-2, pp. 113-5.  
Journal code: 0375403. ISSN: 0022-510X.

PUB. COUNTRY: Netherlands  
DOCUMENT TYPE: (CASE REPORTS)  
Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200408  
ENTRY DATE: Entered STN: 6 Jun 2004  
Last Updated on STN: 20 Aug 2004  
Entered Medline: 19 Aug 2004

AB An increased incidence of ischemic stroke has been reported in patients with Crohn's disease. Cerebral infarcts are usually considered as a complication of the hypercoagulable state associated with this inflammatory bowel disease (IBD). The association between Crohn's disease, hyperhomocysteinemia and large-artery stroke of the young has rarely been reported. A 39-year-old woman, with prior medical history of Crohn's disease and hypertension, presented with an ischemic stroke of the left internal carotid artery (ICA) territory. Etiological workup disclosed bilateral high-grade ICA stenosis and atheroma of the subclavian and vertebral arteries. Exhaustive search for prothrombotic factors showed inflammation, with an increased level of fibrinogen and factor IX, and a marked hyperhomocysteinemia. Both vitamin B1 and vitamin B6 plasmatic levels were decreased. Heterozygous C677T methylene-tetrahydrofolate reductase gene mutation was present. This observation highlights the combined proatherogenic effect of vitamin B deficiency-induced hyperhomocysteinemia and inflammation leading to large-artery stroke of the young in the setting of Crohn's disease. Our case report stresses the importance of vitamin deficiency screening in patients with IBD in terms of stroke prevention.

L11 ANSWER 3 OF 3 MEDLINE on STN  
ACCESSION NUMBER: 2002340948 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 12083316  
TITLE: Hyperhomocysteinemia, and low intakes of folic acid and vitamin B12 in urban North India.  
AUTHOR: Misra Anoop; Vikram Naval K; Pandey R M; Dwivedi Manjari; Ahmad Faiz Uddin; Luthra Kalpana; Jain Kajal; Khanna Nidhi; Devi J Rama; Sharma Rekha; Guleria Randeep  
CORPORATE SOURCE: Department of Medicine, All India Institute of Medical Sciences, New Delhi.. anoopmisra@hotmail.com  
SOURCE: European journal of nutrition, (2002 Apr) Vol. 41, No. 2, pp. 68-77.  
Journal code: 100888704. ISSN: 1436-6207.  
PUB. COUNTRY: Germany: Germany, Federal Republic of  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200301  
ENTRY DATE: Entered STN: 27 Jun 2002  
Last Updated on STN: 22 Jan 2003  
Entered Medline: 21 Jan 2003

AB BACKGROUND AND AIM: An adverse coronary risk profile has been reported amongst rural-to-urban migrant population living in urban slums undergoing stressful socio-economic transition. These individuals are likely to have low intakes of folic acid and vitamin B12, which may have an adverse impact on serum levels of homocysteine (Hcy). To test this hypothesis, we studied serum levels of Hcy in subjects living in an urban slum of North India and healthy subjects from urban nonslum area. METHODS: Group I consisted of 46 subjects (22 males and 24 females) living in an urban

slum, while group II consisted of healthy subjects ( $n = 26$ , 13 males and 13 females) living in the adjacent non-slum area. Anthropometric measurements, biochemical profile (fasting blood glucose, total cholesterol, serum triglycerides, low-density lipoprotein cholesterol, and high-density lipoprotein cholesterol) and fasting serum levels of Hcy were measured. Dietary intakes of folic acid, vitamin B12, vitamin B1, and iron were calculated by the 24-hour dietary recall method. Serum levels of Hcy were correlated with dietary intakes of nutrients, anthropometry, and metabolic variables. RESULTS: Sex-adjusted serum levels of Hcy in micromol/L (Mean  $\pm$  SD) were high, though statistically comparable, in both the groups (group I:  $20.8 \pm 5.9$  and group II:  $23.2 \pm 5.9$ ). Overall, higher than normal serum levels of Hcy ( $> 15$  micromol/L) were recorded in 84% of the subjects. A substantial proportion of subjects in both groups had daily nutrient intakes below that recommended for the Asian Indian population (folic acid: 93.4% in group I and 96.7% in group II, vitamin B12: 76.1 % in group I and 88.4% in group II). However, between the two groups, average daily dietary intakes of both the nutrients were statistically comparable. As compared to non-vegetarians, vegetarians showed lower intakes of folic acid ( $p < 0.01$ ) and vitamin B12 ( $p < 0.01$ ) in both groups. On multivariate linear regression analysis with serum Hcy as the response variable and vegetarian/non-vegetarian status and sex (male/female) as predictor variables, higher serum levels of Hcy were observed in vegetarians vs non-vegetarians ( $t = 4.6$ ,  $p < 0.05$ ) and males vs females ( $\beta = 5.3$ ,  $p < 0.01$ ). CONCLUSIONS: Low intakes of folic acid and vitamin B12, and hyperhomocysteinemia, in both the healthy population living in urban slums and adjacent urban non-slum areas, are important observations for the prevention of nutritional and cardiovascular diseases in the Indian subcontinent.

L16 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1938:18390 CAPLUS

DOCUMENT NUMBER: 32:18390

ORIGINAL REFERENCE NO.: 32:2611d-g

TITLE: Causes of cancer and therapeutic applications based upon them

AUTHOR(S): McLeod, James C.; Ravenel, Leonard J.

SOURCE: J. S. Carolina Med. Assoc. (1938), 34, 37-47

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB When injections (chiefly intramuscular) of exts. of *Aspergillus niger* and *Saccharomyces cerevisiae* were given to approx. 150 advanced cancer cases abandoned as hopeless, practically all the patients showed subjective improvement and many showed notable degrees of shrinkage of the tumor masses. Often a resolution of as much as 30% by volume occurred within 24 hrs. of the 1st injection. Histological studies indicated that the primary effect of the extract was rapid dehydration of malignant protoplasm. In one patient a fibroid tumor was not affected while a cancer and its metastases showed regression upon injection of the exts. Most of the improved cases showed recurrences; a few however did not. The exts. contained oxidases, dehydrogenases, catalase, cytochrome, the pyrophosphoric ester of vitamin B1 (cocarboxylase) and the flavin complex with vitamin B2. A lack of vitamin B1 or cocarboxylase may be concerned in the etiology of cancer. Exts. from pig duodenal mucosa, containing phosphatase, gave subjective improvement but no regression in the cancers. Best results were obtained with combined treatment with the yeast, *Aspergillus*, and duodenal mucosa exts., together with certain catalytic agents. No statistical data are given.

L17 ANSWER 12 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1949:29979 CAPLUS  
DOCUMENT NUMBER: 43:29979  
ORIGINAL REFERENCE NO.: 43:5490a-b  
TITLE: Comparative thiamine saturations in women with uterine cancer and in normal women  
AUTHOR(S): Jailer, Joseph W.  
SOURCE: Cancer (1949), 2(No. 1), 98-9  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable  
AB There appears to be no significant difference between the thiamine saturation status of patients with carcinoma of the uterus and controls without cancer. No instance of thiamine deficiency was noted.

L17 ANSWER 13 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1948:17735 CAPLUS  
DOCUMENT NUMBER: 42:17735  
ORIGINAL REFERENCE NO.: 42:3823d-e  
TITLE: Contractile activity of the uterus and vitamin B1  
AUTHOR(S): Chernov, V. M.; Mazaev, P. N.; Kudryavina, N. A.  
SOURCE: Akusherstvo i Ginekol. (1947), (No. 1), 16-20  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable  
AB Vitamin B1 on single intravenous injection of 60 mg. (per rabbit) leads to considerable increase of uterine contraction in nonpregnant rabbits. Smaller doses (1-6 mg.) give smaller effect, while 0.5 mg. has no measurable effect. The effect is more pronounced in pregnant animals. The effect is not metabolic but neuro-humoral in nature.

L17 ANSWER 14 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1947:37678 CAPLUS  
DOCUMENT NUMBER: 41:37678  
ORIGINAL REFERENCE NO.: 41:7466g-i,7467a  
TITLE: Thiamine for painless labor.  
AUTHOR(S): Shub, P.  
SOURCE: Am. Rev. Soviet Med. (1947), 4, 476  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable  
AB The effect of vitamins in pregnancy has been studied. The low concentration of vitamin B1 in the urine of pregnant women suggests a relation between a lack of this vitamin and labor pains. Vitamin B1 was administered intramuscularly, intravenously, or orally to 900 women in labor. The intravenous route was found most satisfactory, but the effects were transient. Intramuscular injections met all the requirements when given in 60-mg. doses. If pain reappeared, an addnl. 40 mg. was given. The analgesic effect appeared within 10-15 min. and lasted till the end of labor in 40% of the cases. In 51.2% the effect was somewhat less, in 3.2% it was of short duration, and in 5.6% the injection failed to produce results. The method proved harmless to mother and newborn. Thiamine strengthens uterine contractions and reduces the duration of labor to one half. It seems that the vitamin retards muscle fatigue by stimulating the deposit of glycogen in the muscles and inhibiting the formation of lactic and pyrotartaric acids.

L17 ANSWER 15 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1947:37677 CAPLUS  
DOCUMENT NUMBER: 41:37677  
ORIGINAL REFERENCE NO.: 41:7466g-i,7467a  
TITLE: Thiamine for painless labor  
AUTHOR(S): Shub, P.  
SOURCE: Med. Rabotnik (1946), (August 1), 3  
DOCUMENT TYPE: Journal

LANGUAGE: Unavailable  
AB The effect of vitamins in pregnancy has been studied. The low concentration of vitamin B1 in the urine of pregnant women suggests a relation between a lack of this vitamin and labor pains. Vitamin B1 was administered i.m., i.v., or orally to 900 women in labor. The i.v. route was found most satisfactory, but the effects were transient. I.m. injections met all the requirements when given in 60-mg. doses. If pain reappeared, an addnl. 40 mg. was given. The analgesic effect appeared within 10-15 min. and lasted till the end of labor in 40% of the cases. In 51.2% the effect was somewhat less, in 3.2% it was of short duration, and in 5.6% the injection failed to produce results. The method proved harmless to mother and newborn. Thiamine strengthens uterine contractions and reduces the duration of labor to one half. It seems that the vitamin retards muscle fatigue by stimulating the deposit of glycogen in the muscles and inhibiting the formation of lactic and pyrotartaric acids.

L17 ANSWER 16 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1946:31446 CAPLUS  
DOCUMENT NUMBER: 40:31446  
ORIGINAL REFERENCE NO.: 40:6133d-g  
TITLE: Is vitamin E a specific fertility vitamin?  
AUTHOR(S): Gaehtgens, G.  
CORPORATE SOURCE: Univ. Leipzig  
SOURCE: Vitamine und Hormone (Leipzig) (1943), 4, 227-73  
From: Chem. Zentr. 1944, II, 234-5.  
CODEN: VTHRAA; ISSN: 0504-510X

DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable

AB cf. C.A. 38, 4013.3. Present knowledge regarding vitamin E deficiency and its biol. results and present theories regarding the mechanism of action of vitamin E (relation to the anterior lobe of the pituitary, to the sex hormones, to the corpus luteum hormone, and to intermediate metabolism) are discussed. Tests were made of the pharmacol. properties of vitamin E, with normal mice, rats, rabbits, and bitterling. The expts. were carried out for the purpose of determining (1) if a relationship exists between vitamin E and the choriogenic anterior-lobe-like hormone of the placenta in the sense of producing an activation of this latter substance, (2) if the vitamin has an activating effect on the gonadotropic hormone of the anterior lobe, (3) if the vitamin acts as an activator of the follicular hormone, and (4) if it produces a progesterone effect or if it may replace the corpus luteum hormone. The results indicate that the remarkable interference with reproduction brought about by a vitamin E deficiency is of a nonspecific nature and that the vitamin shows no selective relation to the sexual-hormonal system. The question of specificity as regards the neuromuscular system has not yet been sufficiently investigated. Like all other vitamins, vitamin E affects the metabolism. In particular, there was evidence of a relation to the carbohydrate metabolism and to the phosphorylizing processes. The specificity of vitamin E in large doses in producing an effect on the uterine mucous membrane similar to that of progesterone has not yet been demonstrated. The action of vitamin E is possibly similar to that of vitamin B1, with the chief point of attack being in the musculature.

L17 ANSWER 17 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1946:19549 CAPLUS  
DOCUMENT NUMBER: 40:19549  
ORIGINAL REFERENCE NO.: 40:3818a-b  
TITLE: Thiamine deficiency and high estrogen findings in uterine cancer and in menorrhagia  
AUTHOR(S): Ayre, J. Ernest; Bauld, W. A. G.  
CORPORATE SOURCE: Royal Victoria Hosp., McGill Univ., Montreal, Can.  
SOURCE: Science (Washington, DC, United States) (1946), 103, 441-5

CODEN: SCIEAS; ISSN: 0036-8075  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable  
AB The findings of abnormal estrogenic activity coupled with thiamine deficiency in cases of menorrhagia and uterine cancer suggest a possible etiological correlation between the dietary deficiency, the abnormal estrogen level, and the pathol. lesion. Thiamine was the only deficient B factor. The estrogenic activity was studied by cornification in vaginal smears.

L17 ANSWER 18 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1945:30177 CAPLUS  
DOCUMENT NUMBER: 39:30177  
ORIGINAL REFERENCE NO.: 39:4924a-b  
TITLE: Decreased sensitivity to pituitrin of the isolated uterus of the guinea pig deprived of thiamine, and the potentiation of the oxytocic action of pituitrin by thiamine hydrochloride  
AUTHOR(S): Pellegrino, J.; Pinho, Joaquim  
SOURCE: Rev. brasil. biol. (1945), 5, 61-7  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable  
AB cf. C.A. 39, 1465.4. Thiamine deficiency decreased the sensitivity of the uterus to pituitrin to about 1/6 that of normal controls. Thiamine-HCl, 0.01-0.02% in Tyrode-solution bath, reinforced the oxytocic action of pituitrin on uteri from both normal and thiamine-deficient guinea pigs.

L17 ANSWER 19 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1940:48517 CAPLUS  
DOCUMENT NUMBER: 34:48517  
ORIGINAL REFERENCE NO.: 34:7428d-e  
TITLE: Pharmacological action of vitamin B1  
AUTHOR(S): Mano, Tyutaro  
SOURCE: Japanese Journal of Medical Sciences [Part] 4: Pharmacology (1940), 12(No. 2/3); Proc. Japan. Pharmacol. Soc. 13), 98-100  
CODEN: JPMRAB; ISSN: 0368-3745  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable  
AB Natural B1, m. 232°, and synthetic B1, m. 233°, killed 1 out of 3 frogs given 4000 mg./kg. and killed mice on subcutaneous injection of 700 mg./kg. and intravenous injection of 130-140 mg./kg. Another synthetic vitamin B1, m. 244°, killed 3 out of 3 frogs at 4000 mg./kg., and the fatal doses for mice were 500 and 100 mg./kg., resp. Intravenous injection of 0.05 γ/kg. of the product m. 244° or of 0.5 γ/kg. of the others caused respiratory stimulation; 5 mg./kg. of all products caused marked respiratory stimulation and clonic-tonic convulsions. Isolated intestinal strips were stimulated; uterine strips were depressed.

L17 ANSWER 20 OF 24 MEDLINE on STN  
ACCESSION NUMBER: 2001638815 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 11687013  
TITLE: Herbal and dietary therapies for primary and secondary dysmenorrhoea.  
AUTHOR: Wilson M L; Murphy P A  
CORPORATE SOURCE: Department of Obstetrics and Gynaecology, National Women's Hospital, Claude Road, Epsom, Auckland, New Zealand, 1003.. ml.wilson@auckland.ac.nz  
SOURCE: Cochrane database of systematic reviews (Online), (2001) No. 3, pp. CD002124. Ref: 40  
Journal code: 100909747. E-ISSN: 1469-493X.  
PUB. COUNTRY: England: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200203

ENTRY DATE: Entered STN: 7 Nov 2001  
Last Updated on STN: 3 Apr 2002  
Entered Medline: 28 Mar 2002

AB BACKGROUND: Dysmenorrhoea refers to the occurrence of painful menstrual cramps of uterine origin and is a common gynaecological complaint. Common treatment for dysmenorrhoea is medical therapy such as nonsteroidal anti-inflammatories (NSAIDs) or oral contraceptive pills (OCPs) which both work by reducing myometrial activity (contractions of the uterus). The efficacy of conventional treatments such as nonsteroidals is considerable, however the failure rate is still often 20-25%. Many consumers are now seeking alternatives to conventional medicine and research into the menstrual cycle suggests that nutritional intake and metabolism may play an important role in the cause and treatment of menstrual disorders. Herbal and dietary therapies number among the more popular complementary medicines yet there is a lack of taxonomy to assist in classifying them. In the US, herbs and other phytomedicinal products (medicine from plants) have been legally classified as dietary supplements since 1994. Included in this category are vitamins, minerals, herbs or other botanicals, amino acids and other dietary substances. For the purpose of this review we use the wider term herbal and dietary therapies to include the assorted herbal or dietary treatments that are classified in the US as supplements and also the phytomedicines that may be classified as drugs in the European Union.

OBJECTIVES: To determine the efficacy and safety of herbal and dietary therapies for the treatment of primary and secondary dysmenorrhoea when compared to each other, placebo, no treatment or other conventional treatments (e.g. NSAIDS).

SEARCH STRATEGY: Electronic searches of the Cochrane Menstrual Disorders and Subfertility Group Register of controlled trials, CCTR, MEDLINE, EMBASE, CINAHL, Bio extracts, and PsycLIT were performed to identify relevant randomised controlled trials (RCTs). The Cochrane Complementary Medicine Field's Register of controlled trials (CISCOM) was also searched. Attempts were also made to identify trials from the National Research Register, the Clinical Trial Register and the citation lists of review articles and included trials. In most cases, the first or corresponding author of each included trial was contacted for additional information.

SELECTION CRITERIA: The inclusion criteria were RCTs of herbal or dietary therapies as treatment for primary or secondary dysmenorrhoea vs each other, placebo, no treatment or conventional treatment. Interventions could include, but were not limited to, the following; vitamins, essential minerals, proteins, herbs, and fatty acids.

Exclusion criteria were: mild or infrequent dysmenorrhoea or dysmenorrhoea from an IUD.

DATA COLLECTION AND ANALYSIS: Seven trials were included in the review. Quality assessment and data extraction were performed independently by two reviewers. The main outcomes were pain intensity or pain relief and the number of adverse effects. Data on absence from work and the use of additional medication was also collected if available.

Data was combined for meta-analysis using Peto odds ratios for dichotomous data or weighted mean difference for continuous data. A fixed effects statistical model was used. If data suitable for meta-analysis could not be extracted, any available data from the trial was extracted and presented as descriptive data.

MAIN RESULTS: MAGNESIUM: Three small trials were included that compared magnesium and placebo. Overall magnesium was more effective than placebo for pain relief and the need for additional medication was less. There was no significant difference in the number of adverse effects experienced.

VITAMIN B6: One small trial of vitamin B6 showed it was more effective at reducing pain than both placebo and a combination of magnesium and vitamin B6.

MAGNESIUM AND VITAMIN B6: Magnesium was shown to be no different in pain outcomes from both vitamin B6 and a combination of vitamin B6 and magnesium by one small trial. The same trial also showed that a combination of magnesium and vitamin B6 was

no different from placebo in reducing pain. VITAMIN B1 : One large trial showed vitamin B1 to be more effective than placebo in reducing pain. VITAMIN E: One small trial comparing a combination of vitamin E (taken daily) and ibuprofen (taken during menses) versus ibuprofen (taken during menses) alone showed no difference in pain relief between the two treatments. OMEGA-3 FATTY ACIDS: One small trial showed fish oil (omega-3 fatty acids) to be more effective than placebo for pain relief. JAPANESE HERBAL COMBINATION: One small trial showed the herbal combination to be more effective for pain relief than placebo, and less additional pain medication was taken by the treatment group. REVIEWER'S CONCLUSIONS: Vitamin B1 is shown to be an effective treatment for dysmenorrhoea taken at 100 mg daily, although this conclusion is tempered slightly by its basis on only one large RCT. Results suggest that magnesium is a promising treatment for dysmenorrhoea. It is unclear what dose or regime of treatment should be used for magnesium therapy, due to variations in the included trials, therefore no strong recommendation can be made until further evaluation is carried out. Overall there is insufficient evidence to recommend the use of any of the other herbal and dietary therapies considered in this review for the treatment of primary or secondary dysmenorrhoea.

L17 ANSWER 21 OF 24 MEDLINE on STN  
ACCESSION NUMBER: 56051088 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 13298794  
TITLE: [Immunological relations between vitamin B1 and cocarboxylase (pyrophosphate of thiamine)].  
Relaciones inmunologicas entre la vit. B1 y la cocarboxilasa (pirofosfato de tiamina).  
AUTHOR: SULI M  
SOURCE: La Semana medica, (1956 Feb 16) Vol. 108, No. 7, pp. 238-40; passim.  
Journal code: 0404403. ISSN: 0370-9590.  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: Spanish  
FILE SEGMENT: OLDMEDLINE; NONMEDLINE  
OTHER SOURCE: CLML5630-6943  
ENTRY MONTH: 200305  
ENTRY DATE: Entered STN: Feb 2004  
Last Updated on STN: Feb 2004  
Entered Medline: 1 May 2003

L17 ANSWER 22 OF 24 MEDLINE on STN  
ACCESSION NUMBER: 54108576 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 13188363  
TITLE: [The effects of vitamin B1 on uterine contraction and length of labor].  
Die Wirkung des Vitamins B1 auf die Wehentatigkeit und die Geburtsdauer.  
AUTHOR: PRILL H J  
SOURCE: Zentralblatt fur Gynakologie, (1954) Vol. 76, No. 14, pp. 548-52.  
Journal code: 21820100R. ISSN: 0044-4197.  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: UNSPECIFIED  
FILE SEGMENT: OLDMEDLINE; NONMEDLINE  
OTHER SOURCE: CLML5426-51334-248-467-476  
ENTRY MONTH: 200305  
ENTRY DATE: Entered STN: Feb 2004  
Last Updated on STN: Feb 2004  
Entered Medline: 1 May 2003

L17 ANSWER 23 OF 24 MEDLINE on STN  
ACCESSION NUMBER: 51088522 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 14858972

TITLE: [Study of the effect of vitamin B1 on uterine contractility].  
Etude de l'action de la vitamine B1 sur les contractions douloureuses de l'accouchement.  
AUTHOR: SUREAU M; HEBERT H; CAMOUS P  
SOURCE: Bulletin de la Federation des societes de gynecologie et obstetrique de langue francaise, (1951) Vol. 3, No. 2, pp. 209-10.  
DOCUMENT TYPE: Journal code: 7503396. ISSN: 0046-3515.  
LANGUAGE: Journal; Article; (JOURNAL ARTICLE)  
FILE SEGMENT: UNSPECIFIED  
OTHER SOURCE: OLDMEDLINE; NONMEDLINE  
CLML5120-92453-443-526  
ENTRY MONTH: 200402  
ENTRY DATE: Entered STN: Mar 2004  
Last Updated on STN: Mar 2004  
Entered Medline: 15 Feb 2004

L17 ANSWER 24 OF 24 MEDLINE on STN  
ACCESSION NUMBER: 50030393 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 15420761  
TITLE: [Preventive administration of vitamin B1 and K in pregnancy and its influence on uterine contractions].  
P6raprava tehotnych vitaminy B1 a K. vliv na delo6zna stahy.  
AUTHOR: POLASEK F  
SOURCE: Ceskoslovenska gynekologie, (1950) Vol. 15, No. 3, pp. 161-76.  
DOCUMENT TYPE: Journal code: 0042671. ISSN: 0374-6852.  
LANGUAGE: Journal; Article; (JOURNAL ARTICLE)  
FILE SEGMENT: UNSPECIFIED  
OTHER SOURCE: OLDMEDLINE; NONMEDLINE  
CLML5019-10755-135-257-262-263  
ENTRY MONTH: 200409  
ENTRY DATE: Entered STN: Oct 2004  
Last Updated on STN: Oct 2004  
Entered Medline: 30 Sep 2004

L17 ANSWER 1 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1998:59874 CAPLUS  
DOCUMENT NUMBER: 128:80022  
TITLE: Hemostatic infusion for treatment of juvenile uterine bleeding  
INVENTOR(S): Chajka, Vladimir Kirillovich; Matytsina, Lyubov Aleksandrovna; Iotenko, Boris Anatolevich  
PATENT ASSIGNEE(S): Donetskij Regionalnyj Tsentr Po Okhrane Materinstva I Detstva, Ukraine  
SOURCE: Russ. From: Izobreteniya 1997, (25), 156.  
CODEN: RUXXE7  
DOCUMENT TYPE: Patent  
LANGUAGE: Russian  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2089167	C1	19970910	RU 1994-32117	19940901
			RU 1994-32117	19940901

PRIORITY APPLN. INFO.:  
AB Title only translated.

L17 ANSWER 2 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1980:2529 CAPLUS  
DOCUMENT NUMBER: 92:2529  
TITLE: Behavior of several B-vitamins after radiation and/or cytostatic treatment of gynecological carcinoma  
AUTHOR(S): Ladner, Hans Adolf; Holtz, Fritz  
CORPORATE SOURCE: Strahlenabt., Univ.-Frauenklin., Freiburg/Br., 7800, Fed. Rep. Ger.  
SOURCE: Sonderbaende zur Strahlentherapie (1979), Volume Date 1978, 75(Komb. Strahlen- Chemother.), 191-5  
CODEN: STRSAU; ISSN: 0371-3822  
DOCUMENT TYPE: Journal  
LANGUAGE: German  
AB The deficiency in vitamin B1, vitamin B2, and vitamin B6 in patients with cervical, uterine, and mammary carcinomas was increased by radiation therapy and cytostatic (Endoxan or Adriamycin) treatment. Vitamin B6 administration normalized vitamin B6 levels during radiation, but not cytostatic, treatment.

L17 ANSWER 3 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1975:26469 CAPLUS  
DOCUMENT NUMBER: 82:26469  
TITLE: Interrelation between vitamins of the B-complex group and estradiol  
AUTHOR(S): Sharaf, A.; Gomaa, N.  
CORPORATE SOURCE: Dep. Pharmacol., Natl. Res. Cent., Cairo, Egypt  
SOURCE: Journal of Endocrinology (1974), 62(2), 241-4  
CODEN: JOENAK; ISSN: 0022-0795  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB The uterine weight of ovariectomized rats was more than doubled by daily injection for 7 days with estradiol [50-28-2] (0.1 µg), vitamin B2 [83-88-5], or B6 [8059-24-3], but was unaffected by vitamin B1 [59-43-8], B12 [68-19-9], or pantothenic acid [79-83-4]. Vitamins B1, B2, and pantothenic acid, but not B12, enhanced the effect of estradiol on uterine weight.

L17 ANSWER 4 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1971:28442 CAPLUS  
DOCUMENT NUMBER: 74:28442  
TITLE: Effect of oxytocin on the cardiac activity of the

AUTHOR(S) : intrauterine fetus  
Shkol'nyi, G. K.  
CORPORATE SOURCE: USSR  
SOURCE: Antenatal'naya Okhr. Ploda (1968), 85-95. Editor(s) :  
Pap, A. G. "Zdorovya": Kiev, USSR.  
CODEN: 17ZAAP

DOCUMENT TYPE: Conference  
LANGUAGE: Russian

AB Oxytocin administered i.m. or i.v. at 1-2 unit to women in the 1st period of labor did not significantly affect cardiac activity of the fetus. Oxytocin applied during weak labor contractions was individualized in its dose for the uterine tonus excitability state. Oxytocin may be useful during prophylactic treatment 5-7 days before expected labor in patients with anomalies which suggest a low level of uterine excitability. Combination of oxytocin treatment with estrogens (5000-10,000 unit, i.m.), vitamin B1 (50 mg i.m.), or galascorbin (1-4 times orally), 40% glucose solution (30 ml), and 10% CaCl2 (10.0 ml i.v.), and ATP (1 ml of a 2% solution twice daily starting 2 days before termination of pregnancy) was favorable for both the pregnant woman and her fetus when started 5-7 days before labor.

L17 ANSWER 5 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1970:508049 CAPLUS  
DOCUMENT NUMBER: 73:108049  
TITLE: Electrophysiological study on effects of activated vitamin B1 on movement of uterus  
AUTHOR(S) : Minami, Yoshihiro  
CORPORATE SOURCE: Kansai Med. Sch., Moriguchi, Japan  
SOURCE: Kansai Ika Daigaku Zasshi (1969), 21(3), 369-93  
CODEN: KIDZAK; ISSN: 0022-8400  
DOCUMENT TYPE: Journal  
LANGUAGE: Japanese

AB The administration of activated vitamin B1 (0.2-2 mg/kg) inhibited the arousal reaction which had developed in response to stimulation of the brainstem reticular formation and uterine movement did not increase whether or not stimuli was given to the brain-stem after administration of the vitamin. The arousal reaction results from the activities of the brain-stem reticular formation and hippocampus. The development of consciousness is related to the brain-stem reticular formation and that of pain with the hippocampus. It was concluded that the analgesic mechanism of activated vitamin B1 exists in its inhibitory action of the arousal reaction and that a dosage of 0.2-2 mg/kg directly affects the uterus to shorten delivery time.

L17 ANSWER 6 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1967:26436 CAPLUS  
DOCUMENT NUMBER: 66:26436  
TITLE: Histochemical study of the effects of 60Co short-distance irradiation on cancer of the uterine cervix  
AUTHOR(S) : Udagawa, Toshiji  
CORPORATE SOURCE: Univ. Chiba, Chiba, Japan  
SOURCE: Chiba Igakkai Zasshi (1965), 41(May), 13-31  
CODEN: CIGZAF; ISSN: 0009-3459  
DOCUMENT TYPE: Journal  
LANGUAGE: Japanese

AB Cobalt-60 short-distance irradiation (1000 mc. hr., 4 times every other day, 4000 mc. hr. total) was applied to cancers of the uterine cervix, and probe resection of cancer tissues was performed six times before, during, and after the irradiation in each of 38 cases. In the resected cancer tissues, 29 kinds of metabolites and enzyme activities were histochem. investigated, and the morphological changes were also studied together with these fluctuations. In the irradiated cancer cells,

nucleolus RNA, glycogen, and lipids increased remarkably; DNA, protein-binding SH-radicals, vitamin B1, isocitrate dehydrogenase, malate dehydrogenase, NAD-diaphorase, and esterase decreased considerably in activity. The increase of nucleolus RNA, and the appearance of coarse granules, containing cytoplasmic RNA, glycogen, and lipids, were related to the degeneration of cancer cells. In the cancer stroma loosened by the irradiation,  $\alpha$ -amino radicals, lipids, RNase, and phosphoamidase increased; vitamin B1, isocitrate dehydrogenase, malate dehydrogenase, and NAD-diaphorase decreased or tended to diminish in activity. In the connective tissue in which the tendency for proliferation was morphologically observed, an augmentation in activity of 5'-nucleotidase and adenosine triphosphatase was observed. Further, wandering cells having enzyme activity like histiocytes appeared with degeneration of cancer cells.

L17 ANSWER 7 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1966:38016 CAPLUS  
DOCUMENT NUMBER: 64:38016  
ORIGINAL REFERENCE NO.: 64:7103e-f  
TITLE: Administration of excess vitamin B1, B2, and B6 to pregnant rats and its effects on evolution, morphology, and mineral content of the offspring  
AUTHOR(S): Stefano, Chiappe; Franco, Chiappe  
CORPORATE SOURCE: Univ. Cagliari, Sardinia  
SOURCE: Ann. Ital. Pediat. (1964), 17(6), 587-95  
DOCUMENT TYPE: Journal  
LANGUAGE: Italian  
AB The average body weight, total ash, and the concentration of Na, K, Ca and Mg in normal young rats were 5.6 g., 141 mg., 236, 217, 221, and 25 mg./100 g., resp., on the 1st day of extra-uterine life; 18.9, 980 mg., 250, 260, 435, and 20 mg./100 g. at the 15th day, and 37.3 g., 1780 mg., 258, 230, 690, and 23 mg./ 100 g. at the 30th day. When the mother was given 10 mg. vitamin B1 daily during pregnancy, these values were 4.7 g., 90 mg., 185, 200, 229, and 97 mg./100 g. the 1st day; 18.2 g., 116 mg., 155, 226, 642, and 12 mg./100 g. the 15th day, and 44.4 g., 2804 mg., 198, 208, 722, and 16 mg./100 g. the 30th day. After administration of 20-40 mg. vitamin B6 daily to the mother the same values were 5.2 g., 94 mg., 191, 200, 285, and 40 mg./100 g. the 1st day; 16.1 g., 715 mg., 156, 268, 756, and 31 mg./100 g. the 15th day, and 33.4 g., 1427 mg., 250, 252, 508, and 35 mg./100 g., resp., the 30th day. Riboflavin, given in doses of 20-40 mg. daily caused premature interruption of pregnancy in most of the rats.

L17 ANSWER 8 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1965:466213 CAPLUS  
DOCUMENT NUMBER: 63:66213  
ORIGINAL REFERENCE NO.: 63:12201h  
TITLE: The effects of large doses of vitamin B1 on uterine muscle  
AUTHOR(S): Kostic, Petar  
SOURCE: Archiv fuer Gynaekologie (1965), 202(1), 506-9  
CODEN: ARGYAJ; ISSN: 0003-9128  
DOCUMENT TYPE: Journal  
LANGUAGE: German  
AB Vitamin B1 (100 mg. doses) was given to 172 pregnant women after dilatation had reached 3-4 cm. Uterine contractions then increased in force and frequency.

L17 ANSWER 9 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1953:22863 CAPLUS  
DOCUMENT NUMBER: 47:22863  
ORIGINAL REFERENCE NO.: 47:3957i  
TITLE: Action of aneurin and cocarboxylase on the uterine

AUTHOR(S) : horn of the guinea pig  
Vanlerenberghe, J.; Robelet, A.  
SOURCE: Journal de Physiologie (Paris, 1946-1992) (1952), 44,  
341-3  
CODEN: JOPHAN; ISSN: 0021-7948  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable  
AB Characteristic uterine contractions were induced with both compds.

L17 ANSWER 10 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1952:67851 CAPLUS  
DOCUMENT NUMBER: 46:67851  
ORIGINAL REFERENCE NO.: 46:11360d-e  
TITLE: Effect of vitamin B1 on contraction of the uterus  
AUTHOR(S): Magidei, M. D.  
CORPORATE SOURCE: 1st Med. Inst., Moscow  
SOURCE: Sovetskaya Meditsina (1949), 13(No. 2), 27  
From: Chem. Zentr. II, 1836(1950).  
CODEN: SOMEAU; ISSN: 0038-5077  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable  
AB A study was made of the effect of thiamine-HCl (I) on contraction of the isolated uterine cornu from pregnant and nonpregnant guinea pigs. Concns. of 1, 2.5, 5, and 7.5 γ of I per 100 cc. of Ringer solution produced no increase in uterine contractions, concns. of 10 to 15 γ had only an insignificant effect, while concns. of 20-30 γ appreciably increased the contractions.

L17 ANSWER 11 OF 24 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1952:57822 CAPLUS  
DOCUMENT NUMBER: 46:57822  
ORIGINAL REFERENCE NO.: 46:9685i,9686a  
TITLE: The urinary excretion of pyruvic acid during labor in relation to the administration of vitamin B1  
AUTHOR(S): Lenzi, E.  
CORPORATE SOURCE: Univ. Perugia, Italy  
SOURCE: Rivista Italiana di Ginecologia (1948), 31, 333-51  
From: Abstracts World Surg., Obstet., & Gynaecol. 5, 179(1949)  
CODEN: RIGIAR; ISSN: 0035-6840  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable  
AB Vitamin B1 (I) is a coenzyme in the metabolism of pyruvic acid (II). With increased muscular effort, increased I is needed to deal with the excess II arising from carbohydrate metabolized by muscle. Some 22 parturient women were injected with 50 mg. of I intramuscularly. The amts. of II in mg. eliminated in the urine in 24 hrs. for women receiving I, and for nontreated controls, resp., were: some time before labor, 529, 456; in the first 24 hrs. of labor, 380, 621; in 24 hrs. during the puerperium, 297, 374. I appears to assist in the complete utilization of II produced by the active uterine muscle.